

COLLECTION OF SWAB SAMPLES FOR AVIAN INFLUENZA (AI) SURVEILLANCE

- ❑ The preferred specimens for the real-time RT-PCR (rRT-PCR) assay and virus isolation are tracheal or oropharyngeal swabs from gallinaceous birds, such as chickens, turkeys, guinea fowl, pheasants, quail, etc. For other birds, such as ducks, geese, etc., cloacal swabs are preferred. Cloacal swabs can be tested by rRT-PCR but are generally less productive because the organic load in cloacal swabs may interfere with efficient recovery of target RNA; therefore, cloacal swabs should be tested by virus isolation before they are considered to be negative.
- ❑ The preferred types of swabs are cotton tipped swabs with wooden sticks or dacron polyester tipped swabs. Do not use calcium alginate swabs as they may contain substances that inactivate some viruses and inhibit PCR testing. Swabs should be placed in brain-heart-infusion broth (BHI) tubes or viral transport media.
- ❑ Swabs can be pooled as follows:
 - Tracheal/oropharyngeal swabs: 5 birds/tube
 - Cloacal swabs: 5 birds/tube
 - DO NOT POOL cloacal and tracheal/oropharyngeal swabs together.
 - Swabs from multiple avian species must be collected and pooled separately.
- ❑ Each swab should be vigorously swirled to dislodge contents into the medium, and the swab should be squeezed against the walls of the tube before removal. The specimens should be kept chilled (wet ice or cold gel packs) and shipped to the laboratory by overnight courier. If samples cannot be sent until the following day, keep them refrigerated overnight. Do not place them in a freezer.
- ❑ If differential diagnosis is desired for diseases such as infectious laryngotracheitis (ILT) or *Mycoplasma gallisepticum*, the following tissues should be collected and shipped on wet ice or cold gel packs:
 - Lung
 - Spleen
 - Brain
 - Trachea
- ❑ Pack specimens in a bag or other container to prevent leakage. Use absorbent material.
- ❑ Put samples in a sturdy outer container (box) for shipping. It does not have to be a certified shipping box.

Note: These guidelines are subject to change, as circumstances and relevant state or federal protocols may require.